

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

REMARKS/ARGUMENTS

Claim Objections

Claim 14 has been amended to delete commas in three places.

35 U.S.C. § 112 Rejections

The Examiner has maintained his 35 U.S.C. § 112 objection to the term "assertion". To begin, the Examiner is referred to the enclosed document entitled "Orchard-Maler Assertion Proposal" that was published in June 15, 2001 and shows the use of the term "assertion". However, please note in the definition for "assertion" that appears on page 4, it is readily apparent that the term "assertion" is simply given its normal meaning, namely a declaration of fact. It is entirely unclear what aspect of the expression "assertion" is not understood by the Examiner given that it is to be given its normally accepted meaning. Referring to the Webster's Dictionary (version published in 1994), an assertion is an act of asserting, and to assert means "to state positively, usually in anticipation of denial or objection". Applicant is not looking for any special meaning to be given to this term.

A particular example of an assertion in Applicant's specification is a public key certificate, this being a well recognized construct that asserts that a particular public key is associated with a particular name. Likewise for the term "assertion validity" one would normally expect that to mean whether or not an assertion, namely a positive statement, is valid. It is not readily apparent what is unclear about this term.

35 U.S.C. § 101 Rejections

The Examiner had indicated in a telephone interview that amending the claims to all refer to "computer implemented methods", "computer implemented systems", would overcome the 35 U.S.C. § 101 rejections. Applicant made the suggested amendments, not because Applicant considered that they were necessary, but with a view to expediting prosecution.

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

The Examiner has now changed his mind on this matter. In view of this, Applicant has amended claim 1 back to its original form that does not refer to a "computer implemented method", but rather that simply refers to "a method". The amendments to the remaining claims have been left in.

The Examiner states that he is following the new guidelines for assessing the subject matter eligibility requirement. It is useful to walk through the entire process set out in the guidelines for determining whether the claimed invention complies with the subject matter eligibility requirement of 35 U.S.C. § 101. The following is the summary presented in Annex I of the new guidelines, with added paragraph numbering:

A. Does the Claimed Invention Fall Within an Enumerated Statutory Category?

B. Does the Claimed Invention Fall With a § 101 Judicial Exception – Law of Nature, Natural Phenomena or Abstract Idea?

B.1 Does the Claimed Invention Cover a § 101 Judicial Exception, or a Practical

B.1.1 Practical Application by Physical Transformation?

B.1.1 Practical Application That Produces a Useful (35 U.S.C. § 101 utility),

B.2 Does the Claimed Invention Preempt an Abstract Idea, Law of Nature, or Natural Phenomenon (§ 101 Judicial Exception)?

C. Establish on the Record a Prima Facie

It is important to recognize that steps B.1, B.1.1, B.1.2, B.2 only need to be answered if the claims do cover a §101 Judicial Exception.

Now lets apply the guidelines to the subject matter at hand:

A. Is the claimed invention a process, machine, manufacture or composition of matter? (i.e. an Enumerated Statutory Category)

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

In the subject application, the claims include:

- claims to methods – an enumerated statutory category;
- claims to systems – these could fall into machines or manufactures;
- claims to computer readable media – these claims fall within manufacture or composition of matter.

The claimed subject matter is directed the practical realm of managing the sale of assertions between names and public key certificates in bulk; this is equally as practical as the parking meter cases (Ward) and the telephone pay card cases (Lopez).

The examiner argues that it is unclear what the practical application just providing assertions would yield. To begin, the claims now refer to “providing an assertion between a name and a public key”. Applicant has established above that this language is clear; an example of a practical utility is providing public key certificates. It is respectfully submitted that the utility of such certificates is well established and has been well established for a long time; the USPTO now uses them to manage private PAIR and web-based filings.

The Examiner has not alleged that the claims do not fall within an enumerated statutory category.

B. Does the claimed invention fall within one of

- 1) Law of Nature
- 2) Natural Phenomena
- 3) Abstract Idea

(These are the §101 Judicial Exceptions)

In the subject application, it is readily apparent that the claimed invention does not fall within any of the §101 Judicial Exceptions. The Examiner has not alleged that the claims fall within

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

any of the §101 Judicial Exceptions.

Having established that the claimed invention does not fall within any of the §101 Judicial Exceptions, according to the guidelines, that should be the end of the assessment, and the claims should be considered statutory. It appears the examiner has gone on to apply part C of the test and this relates to further analysis that is to be conducted in the event that the part B failed, namely, the claims were found to cover a practical application of a §101 Judicial Exception – a law of nature, natural phenomena or abstract idea.

Continuing with the flowchart:

B.1. Does the Claimed Invention Cover a Practical Application of a §101 Judicial Exception?

As noted above, this question is not applicable since we have not found a §101 Judicial Exception.

B.1.1) Practical Application by Physical Transformation?

As noted above, this question is not applicable since we have not found a §101 Judicial Exception.

B.1.2) Practical Application That Produces a Useful (35 U.S.C. § 101 utility – specific, substantial and credible), Tangible (produce a “real-world” result), and Concrete (substantially repeatable) Result? (i.e. State Street test)

As noted above, this question is not applicable since we have not found a §101 Judicial Exception.

B.2. Notwithstanding the answer to C, does the Claimed Invention Preempt an Abstract Idea, Law of Nature, or Natural Phenomenon (§ 101 Judicial Exception)?

As noted above, this question is not applicable since we have not found a §101 Judicial Exception.

The Examiner goes on to assert that claim 3, a “computer implemented system” could be

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

software per se. Examples of "software per se" include "a program", and a source code listing. A computer implemented system is A) a system – not software per se; B) computer implemented – not software per se. In any case, a "computer implemented system" obviously requires at least one computer, so the requirement for at least one hardware component is met.

It may well be that the recited components of a repository, purchase component, request component, revocation component can each be implemented in software, but the claim as a whole is not directed to software per se. The Examiner's position that the claim could read on a pile of paper containing source code is simply not tenable.

In view of the above the Examiner is respectfully requested to withdraw the 35 U.S.C. § 101 rejections of the claims.

35 U.S.C. § 103 Rejections

The Examiner has withdrawn the previous rejection of the claims as being unpatentable over Ward et al. in view of Hsu et al. The Examiner will call that the Ward reference dealt with pre-paid parking cards. The Examiner has substituted this rejection with a new rejection of the claims as being unpatentable over Hsu et al. in view of Lopez et al. The only difference between the two rejections is that Lopez et al. deals with pre-paid telephone cards whereas Ward et al. dealt with pre-paid parking cards. Lopez et al. has no more relevance to the subject matter of this application than did the Ward et al. reference. Furthermore, the Examiner has similarly failed to satisfy the requirement for establishing a motivation to combine the two references. As such, Applicant's previous argument respecting Hsu and Ward can basically be repeated for Hsu and Lopez, and this is done below:

One of the requirements for establishing a *prima facie* case of obviousness is that the references alone or in combination teach all of the limitations of the claims.

With regard to claim 1, the Examiner has argued that Hsu et al. discloses the two following features:

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

1. Upon request, generating an assertion between a name and a public key, the assertion having a lifetime.
2. Upon request, revoking an assertion.

The Examiner also alleges that Lopez et al. discloses the following three features, which the Examiner argues are not recited by Hsu et al.:

1. Selling a pool of unallocated time.
2. Subtracting the lifetime from the unallocated time.
3. Adding any remaining lifetime to the unallocated time.

Applicant submits that Lopez et al. fails to disclose any of the features identified above.

With regard to "selling a pool of unallocated time", the specific text referred to by the Examiner on page 4, paragraph 35, lines 19-24 reads:

"The PPAS MCA 45 then requests the total prepaid talk time available from the prepaid account 57 in step 860, and the total prepaid talk time (e.g. 1000 minutes) is then calculated by the PPAS 50 according to the location of the telephone 720, and the prepaid account 57 is locked." [emphasis added]

The Examiner has not referred to paragraphs 32 and 40 in Lopez et al. which make it clear that the total prepaid talk time must be calculated because the user has not purchased "a pool of unallocated time", but rather has purchased "a pool of credits" that may be converted into a time based on a time/credit rate that changes based on the parameters of the call.

Paragraph 32, lines 1 to 13 on pages 3 and 4 of Lopez et al. reads:

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

"After disconnection occurs in step 630, if there is any remaining portion (greater than about zero) of the unused portion of the allocated talk time for the A-subscriber, the remaining portion is sent as a message from the MSC1 30 to the HLR 40 in step 640, and passed along by the HLR 40 to the PPAS MCA 45. The PPAS MCA 45 then operates to send the remaining talk time portion and the time/credit rate (previously received in step 435) for credit to the prepaid account in step 660, and sends a message to credit the prepaid account to the PPAS 50 in step 670. The PPAS 50 then calculates the credit to be added based on the remaining talk time portion and the time/credit rate, and credits the result to the prepaid account in step 680."

Paragraph 40, lines 14 to 19 on page 4 of Lopez et al. reads:

"The PPAS MCA 45 returns the remaining portion of the talk time and time/credit rate information to the PPAS 50 in step 1000, and the remaining time (e.g. 3 minutes) is converted to credit units and those credit units are credited to the prepaid B-Subscriber account in step 1010."

Therefore, from paragraphs 32 and 40 of Lopez et al. it is clear that the teachings of Lopez et al. recite selling a pool of credits not a pool of unallocated time.

Furthermore, it is clear that the credit/time rate is not fixed; therefore purchasing a specific number of credits is not equivalent to purchasing a specific amount of time. On page 3, paragraph 27, lines 7 to 11, Lopez et al. states:

"The PPAS 50 calculates the available total prepaid talk time based on the location area (and/or other parameters) for the prepaid account and locks access to the prepaid account to prevent other subscribers from manipulating the total prepaid talk time record 57."

If the available total prepaid talk time varies with the location of the telephone or the

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

"subscriber category", "cell identification", "the time hour of the call" and/or the "predetermined rate", as indicated in paragraph 7 on page 1 of Lopez et al., then it is clear that the credit units on the prepaid account do not correspond to a fixed amount (or pool) of time.

With regard to "subtracting the lifetime from the unallocated time", the Examiner has referred to Page 4, paragraphs 36 and 38, which read:

"In step 880, the PPAS 50 sends the total talk time and time/credit rate information to the PPAS MCA 45, and the PPAS MCA allocates a portion of the total talk time in step 890 to the A-subscriber (e.g. 10 minutes).

The PPAS MCA 45 calculates the updated prepaid talk time for the prepaid account by subtracting the portion of the total prepaid talk time allocated to the A-subscriber operating the telephone 720 and returns the updated prepaid total talk time to the PPAS 50 in step 900. The PPAS 50 then updates the prepaid account total talk time in step 910 and unlocks access to the prepaid account to permit other subscribers to access the prepaid account." [emphasis added]

Once again, the Examiner has failed to also refer to the paragraphs that explain why the PPAS 50 must pass the total talk time and the time/credit rate to the PPAS MCA 45 in order for the PPAS MCA 45 to calculate the updated prepaid talk time. As pointed out above, Lopez et al. discloses selling a pool of credits and therefore teaches subtracting credits from the credit pool not time from a pool of unallocated time.

With regard to "adding any remaining lifetime to the unallocated time", as outlined above with reference to paragraphs 32 and 40, Lopez et al. discloses crediting credit units to the pool of credits and fails to recite "adding any remaining lifetime to the unallocated time".

The Examiner has provided no motivation for combining the Lopez et al. and Hsu et al. references. To begin, it is noted that the Hsu et al. and Lopez et al. searches do not ever

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

reference a single common class. If experts on searching (in this case the U.S.P.T.O. and the International Searching Authority) do not think the classes were relevant to the other patent then it is hardly likely one skilled in the art would consider searching these two classes. More particularly, Lopez et al. references subclasses of class 705 (data processing: financial business practice, management, or cost/price determination) while Hsu et al. references subclasses of class 380 (cryptography). Additionally, Hsu et al. does not mention anything about prepaid calling cards or time. Furthermore, Lopez et al. does not mention anything about cryptography or security.

It is well established that "There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of the persons of ordinary skill in the art." *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

As discussed above, the nature of the problem to be solved is completely different in the two references: the teachings of the prior art do not reference each other in any way, and it is unlikely persons of ordinary skill in the art would be aware of knowledge overlapping the two fields.

Furthermore, the certificates contemplated in Hsu et al. are short-lived certificates and hence there is no significant requirement to save unused time because the amount of unused time for these certificates is minimal. This is evidenced by the following passages in Hsu et al.:

Col. 2, Lines 33-38: "In accordance with these principles, the certificate that is issued to Alice is short-lived, perhaps valid only for a few hours. Such short lived certificates remove the need for a revocation list, and remove the incentive for an interloper to discover Alice's private key."

Col. 3, Lines 57-64: "It is believed that the root cause of many of the key management problems can be traced to the long-lived nature of the certificates. When a certificate is long-lived, the possibility of it becoming invalid increases with time due to unforeseeable and/or uncontrollable

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

events, such as compromise of the employee's private key, the employee leaving the company or leaving the project that requires access authorization, etc."

Col. 5, Lines 11-28: "Significantly, as stated above, the FIG. 2 arrangement does not require an application server to download or to otherwise access or consult a revocation list. Rather, the certificate provides all of the information that an application server need to determine that a) the certificate is valid and b) use of the certificate is authorized. In accordance with the principles disclosed herein this is achieved, at least in part, by having certificates that are short-lived. That is, the expiration time of certificates created by the FIG. 2 arrangement is less than one month. In fact, the typical certificate created by the FIG. 2 arrangement may be good for only one day and perhaps for even less than one day. For example, the expiration time of the certificate may include merely a date, a date with an implicit time (e.g. the end of a business day), or it may include a date and an explicit time (e.g. Mar. 18, 1997 - 16:00).

Col. 7, Lines 14-21: "Correspondingly, the certificate created for the FIG. 2 arrangement differs in character from the prior art certificates obtained for the FIG 1. arrangement. If the latter is likened to a driver's license because it is long-lived, then the former can be likened to a subway token or a bus ticket because it is short-lived. Also, the certificate created for the FIG. 2 arrangement is more like an authorization to an application server than a confirmation of a party's identity."

It is respectfully submitted that it has been clearly established that the references do not teach the claim limitations, and furthermore there is no motivation to combine the references. On this basis, the Examiner is respectfully requested to withdraw the rejection of claim 1 under 35 U.S.C. 103.

The above arguments apply equally to the remaining claims and as such, the Examiner is respectfully requested to withdraw the rejection of the remaining claims under 35 U.S.C. 103 as well. In so doing, Applicant is not conceding that the additional limitations in the remaining claims not discussed herein are in fact taught in the references as alleged by the Examiner.

Appl. No. 09/892,490
Amdmt dated April 24, 2006
Reply to Office Action of January 25, 2006

In view of the foregoing, early favorable consideration of this application is earnestly solicited.

Respectfully submitted,

ROB EVERETT PARKHILL, ET AL

By



Allan Brett

Reg. No. 40,476

Tel.: (613) 232-2486 ext. 323

Date: April 24, 2006

RAB:rd